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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,870	07/06/2000	OSAMU SANO	1560-345P	4434

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EXAMINER

DEPUMPO, DANIEL G

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 02/22/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/582,870

Applicant(s)
Sano

Examiner
Daniel G. DePumpo

Art Unit
3611



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 10, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-43 and 54-73 is/are pending in the application.
- 4a) Of the above, claim(s) 31-33, 41-43, and 56-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29, 30, 34-40, 54, 55, and 59-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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1. It is noted that claims 29, 39-43, 54-58 and 64-73 are independent claims. They are not dependent claims because they do not further limit a claim to which they refer back. 37

CFR 1.75(c). Applicant has previously paid for only 4 independent claims. Consequently, applicant's Deposit Account No. 02-2448 has been charged for 17 additional independent claims.

2. Claims 31-33, 41-43, 56, 57 and 58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention (see the page 3 of the applicant's remarks filed January 10, 2002), there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

3. The drawings are objected to because figures 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Applicant is required to submit a proposed drawing correction in reply to this Office action. In the response filed October 10, 2001, applicant indicated that corrections to Figs. 1-4 were attached to that response. This attachment has not been received. Applicant further requested reconsideration regarding the requirement to label Figs. 5 and 6 as prior art. This request is not understood because Figs. 5 and 6 are expressly disclosed as being "conventional" at page 25 of applicant's specification.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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5. Claims 29, 30, 34-40, 54, 55 and 59-73 are finally rejected under 37 CFR 1.75(b) as being unduly multiplied. Applicant has presented five amendments in this application. Each amendment has added a substantial number of claims. The application currently contains thirty-five lengthy claims, twenty-one of which are independent. Furthermore, many of the claims contain repetitive language. In view of the claims presented in the prior art patents of record, and in view of the claims as originally filed, it is suggested that 3-4 independent claims, with 3-4 claims depending from each independent claim, is sufficient to properly define applicant's invention.

Additionally, it is noted that the claims, as currently presented, do not follow any reasonable semblance of order. Presentation of claims in this manner merely serves to obfuscate issues of patentability and prolong prosecution.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 29, 30, 34-40, 54, 55 and 59-73 are finally rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Throughout the claims, "valve body posts" and "valve spool posts" are recited. See claim 29, for example. This terminology does not appear to be supported by the original specification. Furthermore, it is unclear which elements are being recited.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 29, 30, 34-40, 54, 55, and 59-73 are finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The numerous claims are replete with indefiniteness, some examples of which are listed below. It is noted that the following is merely a list of some examples of indefiniteness. The claims are too numerous and lengthy to specifically point out all instances of indefiniteness.

Throughout the claims, the recitation of "posts" is vague and indefinite because it is unclear what elements applicant is attempting to recite. It is noted that the specification offers no clarification in this regard.

In claim 29, line 5, "include" should be -- includes --. In lines 5 and 6, "alternate pairs of chamfers" is vague and indefinite because it is unclear what these pairs of chamfers "alternate" relative to.

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In claim 30, "alternating pairs of chamfers" appears to be a double positive recitation of the chamfers of claim 29. Also in claim 30, "consecutive valve spool posts" lacks proper antecedent basis.

In claim 38, "throttle area" lacks proper antecedent basis.

In the last line of each of claims 39, 40 and 64-73 "the hydraulic control valve described in claim ..." lacks proper antecedent basis.

In the last line of each of claims 54 and 55, "the chamfers of claim ..." lacks proper antecedent basis.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 29, 34-39 and 54 are finally rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. '107.

Kobayashi discloses a known prior art steering apparatus (col. 1, lines 15- 28) and valve (figs. 4A and 4B) having the structure as claimed. As shown in figs. 4A and 4B, spool 2 includes alternate pairs of chamfers 6.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 59-73 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '107 in view of applicant's admitted prior art of Fig. 4.

As set forth above, Kobayashi discloses substantially all that is claimed but does not disclose that the flow rate is low or zero when steering is not carried out, and becomes high when steering is carried out. As shown in applicant's fig. 4, the flow rate is low or zero when steering is not carried out, and becomes high when steering is carried out. Therefore, it would have been obvious to modify Kobayashi by providing such flow rate for enhanced efficiency.

14. Claims 30, 40 and 55 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Yuuichi (JP 08104246) in view of Kobayashi '107.

Yuuichi discloses a valve having the structure substantially as claimed. As shown in figure 3, the valve spool 31 includes chamfers at 55 on the sections of the post that are adjacent the pump supply 13/42. These are considered to be "alternating pairs of chamfers on consecutive valve spool posts" (claim 30) to the same degree as claimed and disclosed. Yuuichi also discloses chamfers on the valve body at 56, therefore the chamfers are not on "only one of said valve body or said valve spool" as claimed. However, Kobayashi discloses a steering valve (figs. 4A and 4B) having chamfers 6 only on the sections of the spool posts that are adjacent the pump supply. (i.e. Kobayashi discloses that it is not necessary to have chamfers on the valve body.) It would have been obvious to modify Yuuichi, by eliminating the chamfers on the valve body for ease of

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manufacture since Kobayashi discloses that the chamfers are only necessary on the sections of the spool posts that are adjacent the pump supply to reduce noise (col. 4, line 6).

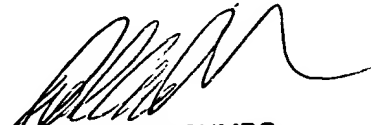
15. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection:

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel G. DePumpo whose telephone number is (703) 308-1113.

dgd
February 18, 2002


DANIEL G. DePUMPO
PRIMARY EXAMINER